Drops commonly used in OPD

- Mydriatic and Cycloplegic drops
- Mechanism of Action:

Parasympatholytic drops that block that action of Acetylcholine on the Sphincter pupillae muscle(leading to pupillary dilatation) and ciliary muscles (leading to paralysis of Accommodation)

- Used for:

Diagnostic purposes:

1- Dilating the pupils for fundus examination

2- Cycloplegic refraction (Temporary paralyzing the ciliary muscles leading to relaxation of accommodation in order to get the total refractive error)

Therapeutic purposes:

1. Prevent or break synechiae formation in Chronic Uveitis
2. To relieve pain caused by pupillary spasm in Acute uveitis
3. To decrease the risk of 2ry hemorrhage in Traumatic hyphema

- Examples:

1. **Tropicomide** drops
2. **Cyclopentolate** drops
3. **Atropine** drops

- Mydriatic drops ONLY
- Sympathomimetic drops that stimulate dilator pupillae muscle (leading to pupillary dilatation)
- Used to dilate the pupils for fundus examination
- They have minimal or NO effect on accommodation
- Examples: **Phenylephrine** drops

- Topical Anesthetic drops
  - ✓ Causes anesthesia of the surface of the eye
  - ✓ Commonly Used in OPD for:
  1. Before measuring IOP by indentation method (Schiotz) or applanation method (Goldmann)
  2. For removal of superficial Foreign Bodies
  - Examples:
  1. **Benox** eye drops (Benoxinate Hydrochloride)
  2. **Tetracaine** eye drops

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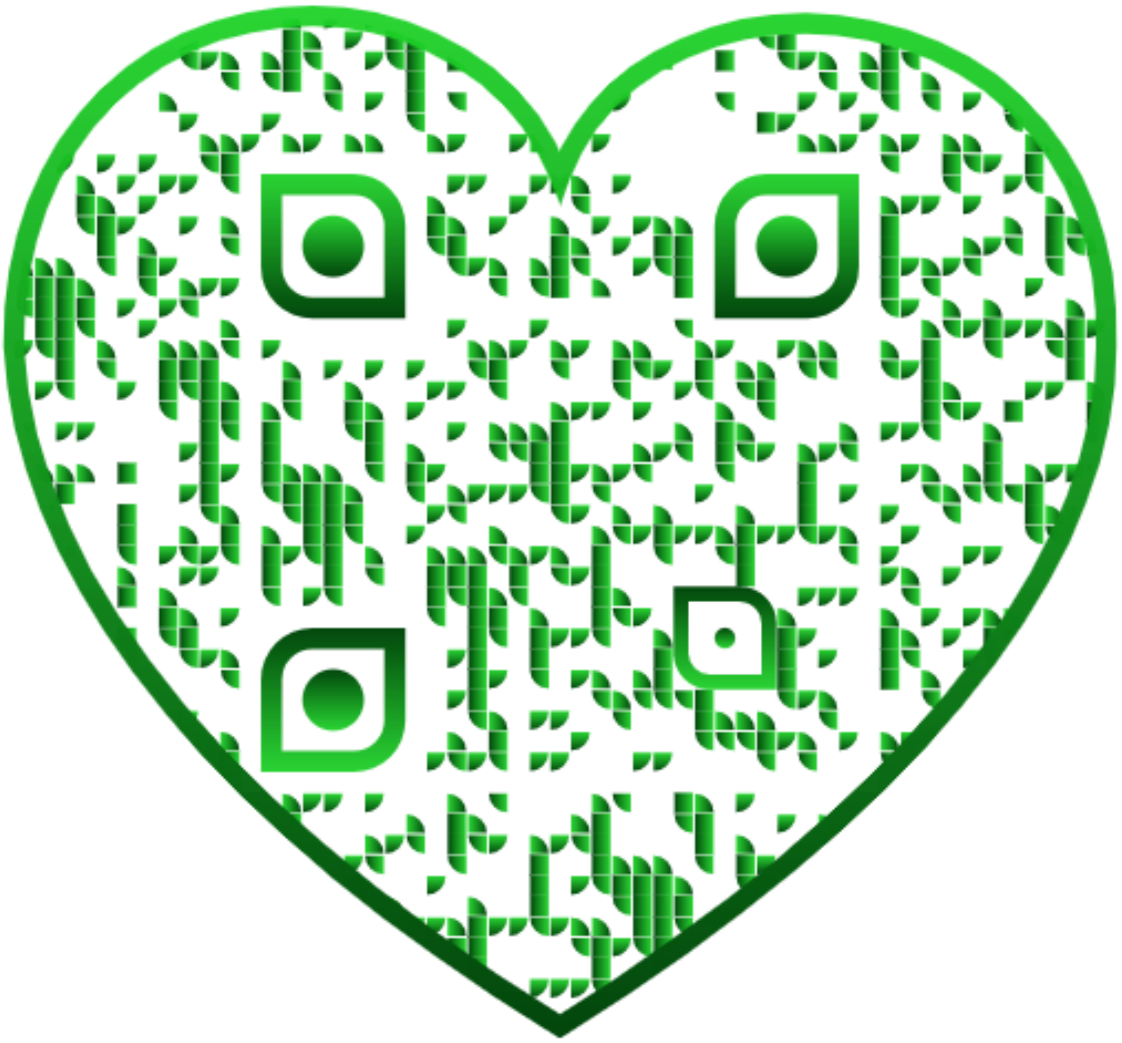

Instruments in OPD

- Refraction

1. Auto refractometer
2. Retinoscope: A device to measure the patient's refractive error

- Slitlamp

Slitlamp

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Goldmann Applanation Tonometer

= To measure IOP

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Goldmann 3 mirror lens

= To examine Anterior chamber angle and retina

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= To examine the retina

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- Intraocular Pressure measurement

Schiotz tonometer

(Indentation)

Goldmann tonometer

(Applanation)

Perkin's tonometer

(Applanation)

- Fundus examination

Direct Ophthalmoscope	Indirect Ophthalmoscope	Slitlamp biomicroscopy
Real erect image	Inverted image, upside down	Inverted image, upside down
Magnification 15 times	Magnification 3 times	Magnification 0.76 times
Narrow field	Wide field	Wide field
Cannot examine the periphery	Can examine the periphery	Can examine the periphery

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